

Thames Science Center

STACKS

FEB. 1968



NATURALIST NOTEBOOK

FEBRUARY 1968

VOLUME III NO. 2



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Published by the

THAMES SCIENCE CENTER

622 Williams Street
New London, Connecticut 06320

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The NATURALIST NOTEBOOK is published monthly. Subscription available through membership only.

The Thames Science Center is a non-profit organization seeking a quality environment through education.

The active support of children and adults in the Science Center, its programs, activities and efforts is earnestly solicited.



The Interpretive Museum of 622 Williams Street, New London, Connecticut 06320
The Peace Sanctuary Nature Preserve At 200 River Road, Mystic, Connecticut 06355

FEBRUARY'S NATURE CALENDAR

FEBRUARY is the month of <u>real</u> winter. It is usually during this month we have our coldest temperatures and greatest snowfall.

If you walk in the woods during this month, it may seem to you that all life has come to a standstill. Yet this is not so. With a little careful looking on the snow you can find numerous tracks and signs made by many animals. You may see a very small trail running across your path which, if you follow, will usually end as a small hole in the snow. This was done by the little white-footed mouse which stays active all winter. Other tracks to look for are gray squirrel, cottontail rabbit and red fox.

Bird tracks can be found easily. If you throw seed out on the snow in your yard, the snow will soon be covered with the tracks of the little birds that come to eat the food. At the beach, looking in the wet sand along the water's edge will often allow you to see the large webfooted tracks of gulls and ducks that feed along the shore.

Hunting for tracks in February can be a lot of fun.
See how many different kinds you can find on a single
walk. It shows you that there is still much activity in Nature's world even though it may seem to be quite silent
this month.

(Continued next page)

FEBRUARY'S NATURE CALENDAR

February is the snowiest month of the year--be sure your bird feeders are full.

Feb. 2... Ground Hog Day. Sun or no most of Connecticut's woodchucks stay snugly underground.

Feb. 3... Field trip to the Lyme-Saybrook area to observe waterfowl and other winter birdlife.

Feb. 4... Field trip to Waterford Beach--Harkness Park areas in A. M. and Family Film Festival featuring "The OLYMPIC ELK" in P. M.

Feb. 5... Feed birds now.
Cardinals, titmice and chickadees come for sunflower
seed. Juncos, and whitethroated sparrows ground
scratch for mixed seed.

Feb. 9... Sun dials are just about correct for now until the 14th.

Feb. 14... The full Snow Moon shines tonight--on snowy ground???

Feb. 17... Field trip along the Rhode Island shoreline.

Feb. 18... Audubon Wildlife Film Lecture: Charles T. Hotchkiss! "Teton Trails". Series ticket holders and their guests only...sorry!

Feb. 23...Jupiter becomes our evening star setting at 6:45 A.M.

Feb. 26...On this 57th day of the year the day is 11 hours and 6 min. long.
Sun sets at 5:30 P.M.

Feb. 28... Male redwinged blackbirds begin to arrive to set up nesting territories. Watch and listen for them in marshy areas.

Feb. 29... Leap Year Day
... Bachelors Beware!

For a complete listing of the Thames Science Center's programs and activities write to Calendar of Events Bulletin....

The Children's Corner

by TRUDY GARDNER

At the Peace Sanctuary we have several feeding stations. The one near our house has a suet feeder which helps to convince our friend the Downy Woodpecker that he is welcome.



The downy, although fond of the suet, still hunts for grubs and insects that hide under the bark of trees.

Since the food of the downy is under the bark of trees, he can get it all winter and there is no need for him to go south.

Its nest is a hole in a partly dead tree and he changes homes every year.

This bird I enjoy seeing at the feeder is black speckled and barred with white. Its breast is a whitish gray. The front of the head is black with a streak going backward from the eye with a white line above and below it. The male has a bright red patch on the back of his head that looks like a little hat.

If you have ever seen this bird working a tree you might have noticed that it never runs about in the tree and it never turns around and goes down the tree head first, like the Nuthatch.

The downy has feet that are different than the other birds you might have at your feeder. It has two claws



in front and two claws behind, this helps him to hold the bark of the tree. Another aid the downy has is his tail, which is round in shape. The feathers in the middle are strong; the edge of the feathers have

sharp tips like wire which he pushes against the tree, making a bracket so he won't fall.

Each kind of bird has a beak that is made for his own special eating habits. The downy, who eats insects, has a very strong wedge-shaped beak. When he strikes, it makes a small deep hole leading directly to the insect grub. This hole is too small and deep to let the beak pull out the grub; so the downy uses its tongue which can go way beyond the point of the beak. The tongue is hard and leathery and acts like a spear pulling the grub out.

If you don't have a suet feeder at your house and would like to know how to make one, we have a Jr. Naturalist Notebook Insert that I will send you, if you send me a self-addressed envelope in care of the Science Center.



It is a very rewarding experience watching the different birds that a home feeder attracts.

PET CORNER by DAVE RICHARDS

WOOD TURTLES

Have you been down to the Science Center lately? If you have, you probably noticed our two new turtles. They are wood turtles--one of the most active and smartest of turtles that we can keep as pets.

The wood turtle is a pretty animal. The bottom of its shell is yellow, with a large black spot on each plate. The legs and head are dark brown, with a few dark red marks near the body.

Male wood turtles are about $7\frac{1}{2}$ inches long and the females are about $6\frac{1}{2}$ inches long. Although they are called "wood" turtles, they hibernate in water. When the temperature gets warm, they also return to the water to keep cool.

These turtles are easy to keep as pets as long as they have plenty of room to roam around in and a pan of water to soak in. They also enjoy sunning themselves, so be sure that their cage is near a window, if you plan on keeping one at home.

Why not consider membership in The Thames Science Center as a gift for a relative or friend. A special gift card will be sent in your name.

ROCK HOUNDS

MINERAL HARDNESS

This section of the Newsletter will be dealing with collecting and identifying rocks and minerals. The first few articles will be concerned with identification. As the weather becomes warmer, collecting methods and field trip locations will be covered.

It can generally be stated that rocks are made up of one or more minerals. Minerals are natural materials with definite chemical make-ups. Rocks can be compared to a salad; the minerals to the various vegetables making up the salad.

The hardness of minerals is an important characteristic used to identify them. Every mineral has a specific hardness and with a few common objects, the hardness of any mineral can be found. On a scale from one to ten the following activity can help to determine the hardness.

Take the mineral you are interested in and try to scratch it with:

- (1) your fingernail (hardness of $2\frac{1}{2}$)
- (2) a copper penny (hardness of 3)
- (3) a steel pin or a knife (hardness of $5\frac{1}{2}$)
- (4) a piece of glass (hardness of 6)
- (5) a lump of quartz (hardness of 7)

From these few tests that you can make on your mineral, you can narrow down the hardness. For example: A mineral that will scratch your fingernail but will not scratch a penny has a hardness of over $2\frac{1}{2}$ but under 3. The mineral hardness could then be classified as 2-3.

Once you know the hardness of the mineral you may then proceed to note other characteristics that will aid you in identifying your speciman.

Next month we shall study the mineral characteristics of color and streak.

BOOKS TO READ

The Adventure Book of Rocks, Eva K. Evans, N.Y., Capitol Pub. Co., c. 1955. \$4.09.

The Earth a Great Storehouse, Stories Read from the Rocks, and Earth's Changing Surface, Evanston, Ill., Row Peterson & Co. 59¢ each.

Golden Stamp Book of Rocks and Minerals, Paul Shaffer, N. Y., Simon & Schuster, 1958. 59¢.

Riches from the Earth, C. L. Fenton and M. A. Fenton, N. Y., John Day, 1953. \$3.64. The economic importance of rocks and minerals, with a chapter on elements and compounds. Excellent for children.

Rock Hounds, Evelyn S. Lampman, N.Y., Doubleday, 1958. \$3.09. Story of young collectors in a real camp near Fossil, Oregon.

Rocks and Minerals, Zim and Shaffer, N.Y., Simon & Schuster, 1957. \$1.09. A Golden Nature Guide.

TRACKS AND TRAILS by JOHN GARDNER

In the winter when the snow falls is a very good time to follow the tracks of animals. The two pages shown here will help you to identify some of the tracks that you might find in your backyard or neighborhood.

Remember that the size, shape, and clearness of any track depends on the snow or ground conditions.

When looking at tracks be sure to note their size, shape, the number of toes and the pattern of the tracks.

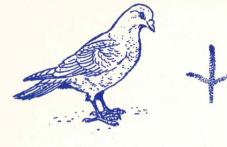
Follow the tracks that you find for a short distance and maybe you will be able to read a story in the tracks, like a bird taking off, an animal meeting another animal, a bird or animal eating, or something else.

SKUNK

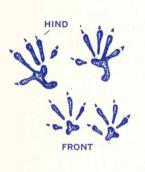




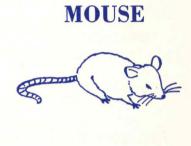
PIGEON











DOG

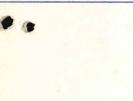






















REMINDER

Audubon Wildlife Film Lecture for February



Charles T. Hotchkiss
"Teton Trails"

Wyoming, provides a striking backdrop for this colorful film produced and narrated by Charles T. Hotchkiss of Homestead, Florida. Intimate visits with unusual birds and other animals weave a dramatic story of life in a land of awesome beauty. A fitting climax is the breathtaking climb up the Grand Teton, the highest peak in the range.

The magnificent Teton Range which lifts abruptly from the valley to a height of over 7,000 feet, bordering Jackson Hole,

Sunday February 18, 1968

ADMISSION LIMITED TO HOLDERS OF SERIES TICKETS AND THEIR GUESTS — NO INDIVIDUAL PERFORMANCE TICKETS AVAILABLE.

WE HAVE A NICE SUPPLY OF BIRD FEEDERS AND SEED FOR YOUR WINTER FEEDING PROGRAM.



BIRD'S FILLING STATION A traditional hanging feeder that will add

beauty to any yard and attract the most popular birds.



BIRD HOUSE & FEEDER KITS

An ideal gift for a beginner or a "do-it-yourselfer". They contain all of the necessary pre-cut parts, hardware and instructions — only a hammer is needed.

ARTICLES OF ADULT INTEREST

WHOOPING CRANES... There were 48 of this countries third rarest bird, the whooping crane, on their wintering ground in Texas. Now there are 47. One adult whooper was shot by a hunter in early Janu-

ary. The bird was seriously wounded and attempts to save it were in vain. The hunter had been hunting for snow geese....

BLUFF POINT... The purchase of fifty-two acres of land adjacent to Bluff Point and currently owned by the New Haven Railroad has been urged by conservationists. Currently, the railroad has proposed to sell the land to an industrial developer who plans to construct a warehouse on the site. A motion that the Town of Groton purchase the land was voted down by the Town Council. They in turn voted that the State be urged to buy the property to add to Bluff Point. With hardly any trees on it, the area would be excellent for a parking lot and thus eliminate the destruction of some of the beautiful Bluff Point woodland to build a lot. The purchase price of the property is reported at \$40,000.

CHRISTMAS BIRD COUNT... The Westport Christmas Count recorded 110 species of birds, to take the honors as the highest count in Connecticut. New Haven was second with 106, New London was third with 103 and Lyme-Saybrook was fourth with 102.

GYPSY MOTHS... The state entomologist reported that there was a considerable decrease in Gypsy Moth egg deposits in Old Lyme. Mr. Turner, the state entomologist, believes the cycle of infection is definitely on the wane.

LANTERN HILL... Several hikes to Lantern Hill are being planned for Spring. These are being designed to show you the beauty and importance of the area. We will keep you informed as to the status of this area which should be saved... the question is can it?

OPEN SPACE... Four acres of land just north of the village of North Stonington was given to The Nature Conservancy as a gift by Mr. Russell Waldo. In addition, the Conservancy also received the area known as the Cathedral Pines, located near the village of Cornwall, a gift of Mrs. Alfred H. T. Bacon, Mr. John C. Calhoun, and Mr. Frank E. Calhoun. The area represents one of the best examples of old growth white pine in Connecticut and perhaps in New England.

AIR POLLUTION... The Connecticut Air Conservation Committee of the Connecticut Tuberculosis and Health Asso. has available, free of charge, The Proceedings of the Connecticut Conference on Clean Air. Request your copy from the Committee at 634 Asylum Avenue, Hartford 06105.

CONN. ARBORETUM... The Thames Science Center has been given permission by the Trustees of Connecticut College to lease a piece of land along Gallows Lane to erect a new home for the Science Center. Construction of this new Interpretive Building will begin as soon as capital funds can be secured.

FORESIGHT... The town of Old Lyme is going to purchase 33 acres of land "for no specific purpose". This land near Rogers Lake will be set aside for some future use.

CAPE ANN... Field trippers who went on the Science Center's adult trip to Cape Ann, Mass. on Jan. 6th were able to see such rarities as an Iceland Gull, 2 Eared Grebes and a Snowy Owl.

HUNTS BROOK... Waterford First Selectman Albert L. Partridge has contacted the Health Department concerning the fly ash pollution of Hunts Brook. Although told he would receive help, none has come to date. During the waiting however, the fly ash continues to go on and on and on.......

STATE-WIDE CARDINAL-TITMOUSE CENSUS... The annual New England census of cardinals and tufted titmice will be held the weekend of February 10 and 11.

The census in Connecticut will attempt to establish a measurement of the base population from which these birds appear to be spreading through New England.

To participate--which consists of noting on an official card the presence of these birds at your feeder--call and ask for a survey card. These are available from the Thames Science Center in cooperation with Connecticut Conservation Association....

LET'S MAKE THIS CENSUS AS SUCCESSFUL AS THE CHRISTMAS COUNT....

We welcome notice of Conservation activities or problems for inclusion in this section of the Natura ist's Notebook.... Please let us know of your local activity so that others may be aware of your efforts and lead their support where possible....

DISCOVERING NATURE WITH YOUR CHILD

by J. F. GARDNER

One very cold afternoon, take a walk outdoors with your child and look for a Rhododendron bush. If it is well below 32°, the leaves will be curled up tight and drooping almost straight down.

Take the time to look at the bush carefully and if possible, try to measure just how tight the leaves are rolled. Perhaps you and your child could each measure the circumference of half a dozen leaves with a tape measure to see just how tight the leaves are rolled. After you measure the leaves, write your results down and save them.

Go out again on another day when the temperature is above 32°--maybe in the 40 or 50 degree range. Return to your Rhododendron bush and look at the leaves. Here is a chance for you as a parent to just look and listen. What will your child see? Well, the leaves will not be tightly rolled nor will they be drooping down so far. Now is the time to bring out the measurements taken on your first trip to compare them with new measurements taken on this day. The differences will be significant.

You ask why the change? Scientists are not positive but believe the expansion and contraction of the leaves is due to a different texture on each side of the leaf. They believe it is a mechanism for reducing the loss of water in the plants in cold weather.

Whatever the reason, it is one more chance for you and your child to discover another of Nature's wonders --together--at home.

CHRISTMAS BIRD CENSUS - 1967

by BOB DEWIRE

There were two Christmas Bird Counts held in our area this year. One was held in New London with the 15-mile diameter circle going from Mason's Island in Mystic to Rocky Neck in East Lyme. The second count was held in Lyme-Saybrook with that circle stretching from Hawk's Nest Beach in Old Lyme to Hammonassett State Beach in Madison.

The Lyme-Saybrook census was held on Thursday, Dec. 28th and much of the day was spent in a snowstorm on slippery roads. The 45 people in 10 parties stuck it out though and ended the day with 102 species.

The weather was much more favorable on the New London census which was held on Saturday, Dec. 30th. Twenty-nine people in 9 parties covered their areas and along with 22 feeders reporting, gave them a total of 103 species.

Below is an entire list of all the species seen on the two counts combined. The numbers indicate how many were seen on each census. Both counts were highly successful and it is hoped they will be so again next year.

SPECIES	NEW LONDON	LYME- SAYBROOK
Common Loon	12	3
Red-throated Loon	1	10
Horned Grebe	175	24
Pied-billed Grebe	8	3
Great Cormorant	32	18 spp?
Double-crested Cormorant	16	- PER -
Great Blue Heron	32	1
Black-crowned Night Heron	8	

	NEW	LYME-
SPECIES	LONDON	SAYBROOK
American Bittern	TO SEE YOU	1
Mute Swan	96	75
Canada Goose	130	263
Snow Goose	1	5
Mallard Duck	606	133
Black Duck	727	389
Gadwall	1	56
Pintail	_	5
Green-winged Teal	_	1
Baldpate (Am. Widgeon)	137	107
Wood Duck	1	
Redhead	1	1
Ring-necked Duck	5	4
Canvasback	184	4
Greater Scaup	768	260
Lesser Scaup	1	
Common Goldeneye	213	54
Bufflehead	715	107
Oldsquaw	6	5
White-winged Scoter	2	143
Surf Scoter	46	31
Common Scoter	13	1
Ruddy Duck	-	60
Hooded Merganser	93	19
American Merganser	2	206
Red-breasted Merganser	530	35
Red-tailed Hawk	2	6
Red-shouldered Hawk	2	1
Rough-legged Hawk		1
Marsh Hawk	<u> </u>	2
Sparrow Hawk	12	13
Ruffed Grouse	2	6
Ring-necked Pheasant	8	3
Clapper Rail		1
Virginia Rail	1	10
Sora Rail	<u>_</u>	1
Coot	59	213
Killdeer	9	5
Black-bellied Plover	1	_
Ruddy Turnstone	20	11

SPECIES NEW LYME SPECIES LONDON SAYBRO	
American Woodcock 1 -	
Common Snipe 2 1	
Purple Sandpiper 28 8	
Dunlin 8 8	
Great Black-backed Gull 106 96	
Herring Gull 5,052 1,471	
Ring-billed Gull 54 186	
Bonaparte's Gull - 39	
Mourning Dove 121 121	
Rock Dove - 6	
Screech Owl - 1	
Snowy Owl 1 1	
Long-eared Owl 1 -	
Short-eared Owl 1 1	
Belted Kingfisher 18 8	
Flicker 17 27	
Yellow-bellied Sapsucker 1 1	
Hairy Woodpecker 14 26	
Downy Woodpecker 51 52	
Horned Lark - 56	
Tree Swallow - 3	
Blue Jay 412 225	
Crow 156 181	
Black-capped Chickadee 414 273	
Tufted Titmouse 65 73	
White-breasted Nuthatch 68 43	
Brown Creeper 6 6	
Winter Wren 1 7	
Long-billed Marsh Wren - 1	
Mockingbird 5 5	
Catbird 4 2	
Sown Thrasher 6 1	
Robin 40 70	
Hermit Thrush 4 -	
Bluebird 9 21	
Golden-crowned Kinglet 2 15	
Ruby-crowned Kinglet 9 2	
Cedar Waxwing 10 8	
Water Pipit 15	

	NEW	LYME-
SPECIES	LONDON	SAYBROOK
Loggerhead Shrike	1	talia a p eriodo de la compansión de la
Starling	2,563	1,782
Myrtle Warbler	95	156
Yellow-breasted Chat	2	3
House Sparrow	424	277
Eastern Meadowlark	99	23
Red-winged Blackbird	56	293
Baltimore Oriole	1	The Training
Rusty Blackbird	40	21
Common Grackle	281	168
Brown-headed Cowbird	1,208	476
Cardinal	93	54
Purple Finch	48	10
House Finch	33	34
Goldfinch	96	57
Rufous-sided Towhee	53	3
Ipswich Sparrow	1	
Savannah Sparrow	4	24
Seaside Sparrow	1	
Vesper Sparrow	1	2007a -
Slate-colored Junco	452	347
Tree Sparrow	333	431
Chipping Sparrow	5	3
Field Sparrow	94	139
White-crowned Sparrow	9	
White-throated Sparrow	301	204
Fox Sparrow	48	3
Swamp Sparrow	5	38
Song Sparrow	182	291
Snow Bunting	6	3
TOTAL SPECIES	103	102
TOTAL INDIVIDUALS	17, 926	10,065

Birds seen on count period in New London were Pintail, Rough-legged Hawk, Horned Lark and Swainson's Thrush. Those in Lyme were Hermit Thrush and Evening Grosbeak.

THE THAMES RIVER

In the winter, the water areas provide the best and greatest concentrations of wildlife activity. The Thames River is among the best of areas around here to see many varieties and large numbers of water birds. The Submarine Base, Electric Boat Company and Charles Pfizer mpany make access to the river front very difficult on the eastern side, so we will follow the river up on the western side.

Let's begin our trip at the mouth of the river by the lighthouse on Pequot Avenue. As you drive north, look off the beach just past the lighthouse. Goldeneyes, surf scoters and red-breasted mergansers are often present here. At low tide carefully looking over the rocks at the edges of the beach may result in your seeing several purple sandpipers—one of the few shorebirds along our cold shoreline. Continue a short distance past a few houses and you will come to a second beach. From here you should be able to see a large flock of ducks called baldpates or American widgeon. These birds winter at this location every year with up to 100 birds present at a time.

After passing this beach area and going up a small hill, you will be able to overlook a large portion of the river. Park along the side of the road and survey the river. Birds that should be present here would include baldpates and horned grebes near the shore and buffleheads, goldeneyes and red-breasted mergansers further out. Occasionally common loons and cormorants are also present.

Still further up the river look off the Green Harbor Beach area (just below the Long Island ferry landing). At low tide there is often a killdeer or two on the beach. Offshore there may be a large flock of greater scaup duck, numbering up to 400 birds. They pack into a tight "raft" and are easily seen. Although this is the best area to see them south of the Gold Star Bridge, the scaup are sometimes found further down the river off Mitchell College.

If you wish to continue further upriver, the next best vantage point is around Smith's Cove in Quaker Hill. In the cove itself, if it is not frozen, there are mallards, black ducks, canvasbacks, greater scaup, buffleheads and hooded mergansers. Occasionally pied-billed grebes and coot are also present.

In the river itself off Mamacoke Island, there are often large concentrations of ducks. Most of them are greater scaup and canvasbacks numbering up to 1,000 birds. Carefully looking through the flocks with binoculars or a telescope may allow you to locate such rarer ducks as redheads and lesser scaup. There are also as many as 40 to 50 mute swans in this part of the river.

The birds move freely from one area to another, but the locations in this article are the most likely places to look. It is interesting to note just how many types of water birds can be found on the Thames River on just a single trip.

ACTIVITIES FOR FEBRUARY:

- Feb. 3 8:30 a.m. Family Nature Jaunt to Lyme-Saybrook Area. Meet at Terra-mar Parking Lot.
- Feb. 4 8:30 a.m. Family Nature Jaunt to Harkness Park and Waterford Beach. Meet at Harkness parking lot.
- Feb. 4 2:30 p.m. Family Film Festival for young and old. Featuring Olympic Elk by Walt Disney. Lyman-Allyn Museum Auditorium.
- Feb. 10 1:30 p.m. Telling time with a Sundial--Junior Workshop for grades 1, 2 and 3. Prior registration required.
- Feb. 17 8:30 a.m. Family Nature Jaunt to Rhode Island Shoreline. A car caravan with stops along the way. Meet at Watch Hill parking lot.
- Feb. 18 3:00 p.m. Audubon Wildlife Film Lecture Series. Charles T. Hotchkiss presents "Teton Trails". Admission limited to holders of series tickets and their guests--No individual performance tickets available.
- Feb. 21 10:00 a.m. Birds in the Hand -- Birds from our feeder will be banded and banding explained.
- Feb. 24 1:30 p.m. Knowing your trees in winter-Junior Workshop (Grades 4, 5 and 6). At the Peace
 Sanctuary in Mystic--Dress for outdoors. If weather
 unfavorable program will be held March 1--Prior
 registration required.

The Thames Science Center is open:

Office--Monday thru Friday 10:00 a.m. until 2:00 p.m. Interpretive Museum--Seven days a week from 1:00 p.m. until 4:30 p.m.

(Closed: Lincoln's and Washington's Birthday)

THAMES SCIENCE CENTER

622 Williams Street
New London, Connecticut 06320
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THE STILLNESS OF WINTER